40. An adjuvant composition as claimed in claim 37, additionally comprising one or both of a polyoxyethylene sorbitan ester or cholic acid or derivative thereof.

41. An adjuvant composition as claimed in claim 37 or claim 40, wherein the polyoxyethylene alkyl ether or ester of formula (I) is haemolytic.

42. An adjuvant composition as claimed in claim 41, wherein the degree of haemolytic activity of the polyoxyethylene alkyl ether or ester is in the range of 0.05-0.0001% as measured in the Guinea Pig blood haemolysis assay.

43. An adjuvant as claimed in claim 41, wherein the polyoxyethylene alkyl ether or ester of formula (I) has a haemolytic activity within a ten fold difference to that of polyoxyethylene-9 lauryl ether or polyoxyethylene-8 stearyl ether, as measured in the Guinea Pig blood haemolysis assay.

44. An adjuvant composition as claimed in claim 37 or claim 40, comprising a polyoxyethylene alkyl ether or ester of formula (I), wherein *n* is 4 to 24.

45. An adjuvant composition as claimed in claim 44, wherein, *n* is 9.

46. An adjuvant composition as claimed in claim 37 or claim 40, comprising a polyoxyethylene alkyl ether or ester of formula (I), wherein R is C_{8-20} alkyl or Phenyl C_{8-20} alkyl.

47. An adjuvant composition as claimed in claim 46, wherein R is C_{12} alkyl.

48. An adjuvant composition as claimed in claim 37 or claim 40, comprising a polyoxyethylene alkyl ether or ester of formula (I), wherein A is a bond, thereby forming an ether.

49. An adjuvant composition as claimed in claim 37 or claim 40, comprising a polyoxyethylene alkyl ether or ester of formula (I), wherein A is -C(O)-, thereby forming an ester.

50. An adjuvant composition as claimed in claim 37 or claim 40, wherein the polyoxyethylene ether or ester of formula (I) is selected from the group comprising: polyoxyethylene-9-lauryl ether, polyoxyethylene-9-lauryl ester, polyoxyethylene-9-stearyl ether, polyoxyethylene-8-stearyl ether polyoxyethylene-4-lauryl ether, polyoxyethylene-35-lauryl ether, polyoxyethylene-23-lauryl ether.

51. An adjuvant combination comprising polyoxyethylene-9 lauryl ether and t-octylphenoxypolyethoxyethanol (TRITON X100™).

52. An adjuvant composition as claimed in claim 37 or claim 40, wherein the total concentration of the detergent present is in the range 0.001-10%.

53. An adjuvant composition as claimed in claim 52, wherein the total concentration of the detergent is in the range 0.001-1%.

54. An adjuvant composition as claimed in claim 53, wherein the total concentration of detergent is in the range of 0.001 to 0.7%.

55. An adjuvant combination, comprising an adjuvant as claimed in claim 37 or claim 40, in combination with at least one additional immunostimulant.

56. An adjuvant combination as claimed in claim 55, wherein the at least one additional immunostimulant is selected from the group comprising: LT, CT, 3D-MPL, CpG, and QS21.

57. An adjuvant composition as claimed in claim 56, wherein the CpG adjuvant is: TCC ATG ACG TTC CTG ACG TT (SEQ ID NO. 1).

58. An adjuvant combination comprising polyoxyethylene-9 lauryl ether, t-octylphenoxypolyethoxyethanol (TRITON X100™), and 3D-MPL.

59. A vaccine comprising an adjuvant as claimed in claim 37 or claim 40, further comprising an antigen.

60. A vaccine as claimed in claim 59, wherein said antigen is selected from the group comprising: Human Immunodeficiency Virus, Varicella Zoster virus, Herpes Simplex Virus type 1, Herpes Simplex virus type 2, Human cytomegalovirus, Dengue virus, Hepatitis A, B, C or E, Respiratory Syncytial virus, human papilloma virus, Influenza virus, Hib, Meningitis virus, Salmonella, Neisseria, Borrelia, Chlamydia, Bordetella, Streptococcus, Mycoplasma, Mycobacteria, Haemophilus, Plasmodium or Toxoplasma, stanworth decapeptide; or Tumour associated antigens (TMA), MAGE, BAGE, GAGE, MUC-1, Her-2 neu, LnRH, CEA, PSA, KSA, or PRAME.

61. A vaccine as claimed in claim 60, wherein said antigen in an antigen or antigenic preparation from Influenza virus.

62. A vaccine composition comprising polyoxyethylene-9 lauryl ether, t-octylphenoxypolyethoxyethanol (TRITON X100™) and an influenza virus antigen.

63. A vaccine as claimed in claim 59, wherein the vaccine is in the form of an aerosol or spray.

64. A spray device, more particularly a bi-dose spray device, filled with a vaccine, as claimed in claim 59.

65. A method of treating a mammal suffering from or susceptible to a pathogenic infection, or cancer, or allergy, comprising the administration of a safe and effective amount of a vaccine composition according to claim 59 to the mammal.

66. A method of treating a mammal suffering from or susceptible to a pathogenic infection, or cancer, or allergy, comprising the mucosal administration of a safe and effective amount of a vaccine composition according to claim 59.